



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2019-0024; Product Identifier 2018-NM-138-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc., Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Bombardier, Inc., Model CL-600-2A12 (601) airplanes. This proposed AD was prompted by a report of damage to the anti-rotation tab on a main landing gear (MLG) side brace fitting due to the installation of an incorrect side brace fitting shaft. This proposed AD would require an inspection of the MLG side brace fitting for damage, a verification of the side brace fitting shaft part number, and replacement of the side brace fitting shaft if necessary. It would also require the installation of an anti-rotation bracket. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; fax 514-855-7401; email [ac.yul@aero.bombardier.com](mailto:ac.yul@aero.bombardier.com); Internet <http://www.bombardier.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0024; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527)

is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Kristopher Greer, Aerospace Engineer, Aviation Safety Section AIR-7B1, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; telephone 781-238-7799.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2019-0024; Product Identifier 2018-NM-138-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this NPRM.

**Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2018-19, dated July 20, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an

unsafe condition for certain Bombardier, Inc., Model CL-600-2A12 (601) airplanes. The MCAI states:

There has been a report of damage to the anti-rotation tab on a Main Landing Gear (MLG) Side Brace fitting. Investigation of the report revealed that a Challenger model CL600 MLG Side Brace shaft had been installed on a Challenger model CL601 Side Brace fitting. Due to the difference in size, this will result in changes to the way the load is transferred between the shaft and the MLG Side Brace fitting and may result in premature cracking of the MLG Side Brace fitting. This condition, if not corrected, could lead to the collapse of the MLG resulting in structural damage to the wing spar and fuel tank.

This [Canadian] AD mandates an inspection of the MLG Side Brace fitting and shaft to verify that the correct shaft part number (P/N) is installed and the fitting is not damaged [damage includes cracking, scratches, gouges, corrosion, defects, and incorrect inner diameter tolerance]. If the Challenger CL600 shaft is installed, this AD mandates replacement with the correct Challenger model CL601 part. If the correct P/N is found installed, this [Canadian] AD also mandates the installation of a bracket to prevent the incorrect part from being installed in the future.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0024.

### **Related Service Information under 1 CFR part 51**

Bombardier has issued Service Bulletin 601-0624, Revision 2, dated January 29, 2018. This service information describes procedures for inspecting the MLG side brace fitting and side brace fitting shaft, installing a replacement side brace fitting shaft if necessary, and installing an anti-rotation bracket.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **FAA's Determination**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

#### **Proposed Requirements of this NPRM**

This proposed AD would require accomplishing the actions specified in the service information described previously.

#### **Costs of Compliance**

We estimate that this proposed AD affects 9 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

##### **Estimated costs for required actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
4 work-hours X \$85 per hour = \$340	\$397	\$737	\$6,633

We estimate the following costs to do any necessary on-condition actions that would be required based on the results of any required actions. We have no way of determining the number of aircraft that might need these on-condition actions:



### Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
8 work-hours X \$85 per hour = \$680	\$7,989	\$8,669

#### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This proposed AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

## **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.



**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Bombardier, Inc.:** Docket No. FAA-2019-0024; Product Identifier 2018-NM-138-AD.

**(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Bombardier, Inc., Model CL-600-2A12 (601) airplanes, certificated in any category, serial numbers (S/N) 3001 through 3009 inclusive and 3011 through 3029 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 57, Wings.

**(e) Reason**

This AD was prompted by a report of damage to the anti-rotation tab on a main landing gear (MLG) side brace fitting due to the installation of an incorrect side brace fitting shaft. We are issuing this AD to address premature cracking of the MLG side brace fitting. This condition, if not corrected, could lead to the collapse of the MLG, resulting in structural damage to the wing spar and fuel tank.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Inspection for Damage and Identification of the Side Brace Fitting Shaft Part Number**

Within 400 flight cycles or 12 months, whichever occurs first, after the effective date of this AD, do the actions specified in paragraphs (g)(1) and (g)(2) of this AD.

(1) Identify the part number of the installed side brace fitting shaft.

(2) Do a detailed visual inspection (DVI) of the side brace fitting for signs of damage, including cracking and gouges, in accordance with paragraph 2.B. of the Accomplishment Instructions of Bombardier Service Bulletin 601-0624, Revision 2, dated January 29, 2018.

**(h) Installation of Anti-Rotation Bracket**

(1) For airplanes on which a side brace fitting shaft having P/N 600-10237-3 is installed and the actions required by paragraph (g) of this AD are done on or after the effective date of this AD: Before further flight, modify the MLG side brace fitting by installing the anti-rotation bracket in accordance with paragraph 2.C. of the Accomplishment Instructions of Bombardier Service Bulletin 601-0624, Revision 2, dated January 29, 2018.

(2) For airplanes on which a side brace fitting shaft having P/N 600-10237-3 is installed and the actions required by paragraph (g) of this AD were done before the effective date of this AD: Within 6 months after the effective date of this AD, modify the MLG side brace fitting by installing the anti-rotation bracket in accordance with

paragraph 2.C. of the Accomplishment Instructions of Bombardier Service Bulletin 601-0624, Revision 2, dated January 29, 2018.

**(i) Replacement of the Side Brace Fitting Shaft and Installation of the Anti-Rotation Bracket**

(1) For airplanes on which a side brace fitting shaft having P/N 600-10237-1 or 600-10237-5 is installed and damage is found during the DVI of the side brace fitting: Before further flight, do a DVI of the anti-rotation tab and side brace fitting aft bushing for cracking, scratches, gouges, corrosion, and inner diameter tolerance, and a special detailed inspection (SDI) of the side brace fitting aft bore for cracks and defects; perform applicable repairs; replace the side brace fitting shaft with a side brace fitting shaft having P/N 600-10237-3; and install the anti-rotation bracket in accordance with paragraph 2.D. of the Accomplishment Instructions of Bombardier Service Bulletin 601-0624, Revision 2, dated January 29, 2018.

(2) For airplanes on which a side brace fitting shaft having P/N 600-10237-1 or 600-10237-5 is installed and no damage is found during the DVI of the side brace fitting: Within 300 flight cycles or 12 months, whichever occurs first, after the inspection required by paragraph (g)(2) of this AD, do a DVI of the anti-rotation tab and side brace fitting aft bushing for cracking, scratches, gouges, corrosion, and inner diameter tolerance, and an SDI of the side brace fitting aft bore for cracks and defects; perform applicable repairs; replace the side brace fitting shaft with a side brace fitting shaft having P/N 600-10237-3; and install the anti-rotation bracket in accordance with paragraph 2.D. of the Accomplishment Instructions of Bombardier Service Bulletin 601-0624, Revision 2, dated January 29, 2018.

**(j) Exceptions to Service Information**

Where Bombardier Service Bulletin 601-0624, Revision 2, dated January 29, 2018, specifies contacting Bombardier's Customer Support Engineering for repair instructions: This AD requires doing the repair before further flight using a method approved in accordance with the procedures specified in paragraph (l)(2) of this AD.

**(k) Credit for Previous Actions**

(1) For an airplane on which a side brace fitting shaft having P/N 600-10237-3 is installed this paragraph provides credit for actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 601-0624, dated October 1, 2012; or Bombardier Service Bulletin 601-0624, Revision 1, dated March 29, 2017.

(2) This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 601-0624, dated October 1, 2012; or Bombardier Service Bulletin 601-0624, Revision 1, dated March 29, 2017, provided that the side brace fitting shaft was identified as having P/N 600-10237-3 and within 6 months after the effective date of this AD, the MLG side brace fitting is modified by installing the anti-rotation bracket in accordance with paragraph 2.C. of the Accomplishment Instructions of Bombardier Service Bulletin 601-0624, Revision 2, dated January 29, 2018.

(3) This paragraph provides credit for actions required by paragraphs (g) and (i), if those actions were performed before the effective date of this AD, provided that any side brace fitting shaft having P/N 600-10237-1 or P/N 600-10237-5 was identified and

replaced with a side brace fitting shaft having P/N 600-10237-3, and the anti-rotation bracket was installed in accordance with paragraph 2.D. of the Accomplishment Instructions of Bombardier Service Bulletin 601-0624, Revision 1, dated March 29, 2017.

**(l) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(m) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian

AD CF-2018-19, dated July 20, 2018, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0024.

(2) For more information about this AD, contact Kristopher Greer, Aerospace Engineer, Aviation Safety Section AIR-7B1, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; telephone 781-238-7799.

(3) For information about AMOCs, contact Aziz Ahmed, Aerospace Engineer, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone: 516-287-7329; fax: 516-794-5531; email: [Aziz.Ahmed@faa.gov](mailto:Aziz.Ahmed@faa.gov).

(4) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; fax 514-855-7401; email [ac.yul@aero.bombardier.com](mailto:ac.yul@aero.bombardier.com); Internet <http://www.bombardier.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued in Des Moines, Washington, on February 21, 2019.

Dionne Palermo,  
Acting Director,  
System Oversight Division,  
Aircraft Certification Service.  
[FR Doc. 2019-03313 Filed: 2/27/2019 8:45 am; Publication Date: 2/28/2019]